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- (a) ANSI material. Copies of these materials may be obtained from the American National Standards Institute, 25 West 43rd St., 4th Floor, New York, NY 10036, or by calling (212) 642–4900, or at http://www.ansi.org.
- (1) ANSI B109.1–1992, Diaphragm Type Gas Displacment Meters, IBR approved for §92.117.
 - (2) [Reserved]
- (b) ASTM material. Copies of these materials may be obtained from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428–2959, or by calling (877) 909–ASTM, or at http://www.astm.org.
- (1) ASTM D86-95, Standard Test Method for Distillation of Petroleum Products, IBR approved for §92.113.
- (2) ASTM D93-09 (Approved December 15, 2009), Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, IBR approved for §92.113.
- (3) ASTM D287-92, Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method), IBR approved for §92.113.
- (4) ASTM D445-09 (Approved July 1, 2009), Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity), IBR approved for \$92.113.
- (5) ASTM D613-95, Standard Test Method for Cetane Number of Diesel Fuel Oil, IBR approved for §92.113.
- (6) ASTM D976-91, Standard Test Method for Calculated Cetane Index of Distillate Fuels, IBR approved for §92.113.
- (7) ASTM D1319-95, Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption, IBR approved for §92.113.
- (8) ASTM D1945-91, Standard Test Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §92.113.
- (9) ASTM D2622-94, Standard Test Method for Sulfur in Petroleum Products by X-Ray Spectrometry, IBR approved for §92.113.
- (10) ASTM D5186-91, Standard Test Method for Determination of Aromatic Content of Diesel Fuels by Supercritical Fluid Chromatography, IBR approved for §92.113.

- (11) ASTM E29-93a, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications, IBR approved for §§ 92.9, 92.305, 92.509.
- (c) SAE material. Copies of these materials may be obtained from the Society of Automotive Engineers International, 400 Commonwealth Dr., Warrendale, PA 15096–0001, or by calling (877) 606–7323 (United States and Canada only) or (724) 776–4970 (outside the United States and Canada only), or at http://www.sae.org.
- (1) SAE Paper 770141, 1977, Optimization of a Flame Ionization Detector for Determination of Hydrocarbon in Diluted Automotive Exhausts, Glenn D. Reschke, IBR approved for §92.119.
- (2) SAE Recommended Practice J244, June 83, Measurement of Intake Air or Exhaust Gas Flow of Diesel Engines, IBR approved for §92.108.

[77 FR 2462, Jan. 18, 2012]

§92.6 Regulatory structure.

This section provides an overview of the regulatory structure of this part.

- (a) The regulations of this part 92 are intended to control emissions from inuse locomotives. Because locomotive chassis and locomotive engines are sometimes manufactured or remanufactured separately, the regulations in this part include some provisions that apply specifically to locomotive engines. However, the use of the term 'locomotive engine" in the regulations in this part does not limit in any manner the liability of any manufacturer or remanufacturer for the emission performance of a locomotive powered by an engine that it has manufactured or remanufactured.
- (b) The locomotives and locomotive engines for which the regulations of this part (i.e., 40 CFR part 92) apply are specified by §92.1, and by the definitions of §92.2. The point at which a locomotive or locomotive engine becomes subject to the regulations of this part is determined by the definition of "new locomotive or new locomotive or gine" in §92.2. Subpart J of this part contains provisions exempting certain locomotives or locomotive engines from the regulations in this part under special circumstances.

- (c) To comply with the requirements of this part, a manufacturer or remanufacturer must demonstrate to EPA that the locomotive or locomotive engine meets the applicable standards of §§ 92.7 and 92.8, and all other requirements of this part. The requirements of this certification process are described in subparts C and D of this part.
- (d) Subpart B of this part specifies procedures and equipment to be used for conducting emission tests for the purpose of the regulations of this part.
- (e) Subparts E, F, G, and H of this part specify requirements for manufacturers and remanufacturers after certification; that is during production and use of the locomotives and locomotive engines.
- (f) Subpart I of this part contains requirements applicable to the importation of locomotives and locomotive engines.
- (g) Subpart K of this part contains requirements applicable to the owners and operators of locomotives and locomotive engines.
- (h) Subpart L of this part describes prohibited acts and contains other enforcement provisions relating to locomotives and locomotive engines.
- (i) Unless specified otherwise, the provisions of this part apply to all locomotives and locomotive engines subject to the emission standards of this part.

§ 92.7 General standards.

- (a) Locomotives and locomotive engines may not be equipped with defeat devices.
- (b) New locomotives fueled with a volatile fuel shall be designed to minimize evaporative emissions during normal operation, including periods when the engine is shut down.
- (c)(1) Locomotive hardware for refueling locomotives fueled with a volatile fuel shall be designed so as to minimize the escape of fuel vapors.
- (2) Hoses used to refuel gaseousfueled locomotives shall not be designed to be bled or vented to the atmosphere under normal operating conditions.
- (3) No valves or pressure relief vents shall be used on gaseous-fueled locomotives except as emergency safety devices, and these shall not operate at

normal system operating flows and pressures.

(d) All new locomotives and new locomotive engines subject to any of the standards imposed by this subpart shall, prior to sale, introduction into service, or return to service, be designed to include features that compensate for changes in altitude to ensure that the locomotives or locomotive engines will comply with the applicable emission standards when operated at any altitude less than 7000 feet above sea level.

§ 92.8 Emission standards.

- (a) Exhaust standards. Exhaust emissions from locomotives and locomotive engines, when measured in accordance with the provisions of Subpart B of this part, shall comply with both the applicable line-haul duty-cycle standards, and the applicable switch duty-cycle standards of paragraph (a)(1) (and/or the standards of paragraphs (a)(3) and (a)(4) of this section, as applicable) of this section, and the smoke standards of paragraph (a)(2) of this section. Emissions that do not exceed the standards comply with the standards.
- (1) Gaseous and particulate standards. Gaseous and particulate emission standards are expressed as gram per brake horsepower hour (g/bhp-hr). Nonmethane hydrocarbon standards apply to locomotives and locomotive engines fueled with natural gas, and any combination of natural gas and other fuels where natural gas is the primary fuel; total hydrocarbon equivalent standards apply to locomotives and locomotive engines fueled with an alcohol, and any combination of alcohol and other fuels where alcohol is the primary fuel. Total hydrocarbon standards apply to all other locomotives and locomotive engines; that is, those not fueled by natural gas or alcohol. The line-haul duty-cycle standards and switch dutycycle standards apply to the respective cycle-weighted emission rates as calculated in subpart B of this part.
- (i) *Tier 0*. The following locomotives (and the engines used in the following locomotives) are subject to the Tier 0 emission standards listed in table A8–1 of this section: Locomotives manufactured on, or after, January 1, 1973, and